

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE FULL RECONSTRUCTION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF US 1 ALT. (BALTIMORE AVENUE) AND MD 450 (ANNAPOLIS ROAD) IN PRINCE GEORGE'S COUNTY. LED VEHICULAR SIGNAL HEADS AND VIDEO CAMERAS FOR PRESENCE DETECTION WILL BE INSTALLED. THE EXISTING STREET LIGHTS WILL BE RE-WIRED. MD 450 IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA THREE-PHASE, FULL TRAFFIC-ACTUATED MODE.

CONTROLLER REQUIREMENTS

INSTALL A NEW EIGHT-PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER, AMPLIFIER, AND ASSOCIATED HARNESSES IN A NEMA SIZE "6" BASE MOUNTED CABINET. INSTALL ONE (1) VIDEO DETECTION INTERFACE FOR 1-4 CAMERAS.

PHONE DROP

THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO NOTIFY MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

THE CONTACT PERSONS FOR DISTRICT #3 / OOTS ARE AS FOLLOWS:

District #3

Ms. Felicia Murphy  
Assistant District Engineer - Traffic  
Phone: 301-513-7358

Mr. Victor Grafton  
District Utility Engineer  
Phone: 301-513-7350

Mr. Vernon Stinnett  
Assistant District Engineer - Maintenance  
Phone: 301-513-7304

Mr. Kevin Nowak  
Assistant District Engineer - Construction  
Phone: 301-513-7385

Office Of Traffic & Safety

Mr. Richard L. Daff Sr.  
Chief, Traffic Operations Division  
Phone: 410-787-7630

Mr. Robert Snyder  
Assistant Division Chief, Traffic Operations  
410-787-7630

Mr. Edward Rodenhizer  
Team Leader, Signal Operations  
Phone: 410-787-7650

Mr. Eugene Bailey  
Team Leader, Sign Operations  
410-787-7670

The Power Company Representative is:  
Potomac Electric Power Company  
8300 Old Marlboro Pike  
Upper Marlboro, Maryland 20772  
Phone: 301-961-5325

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

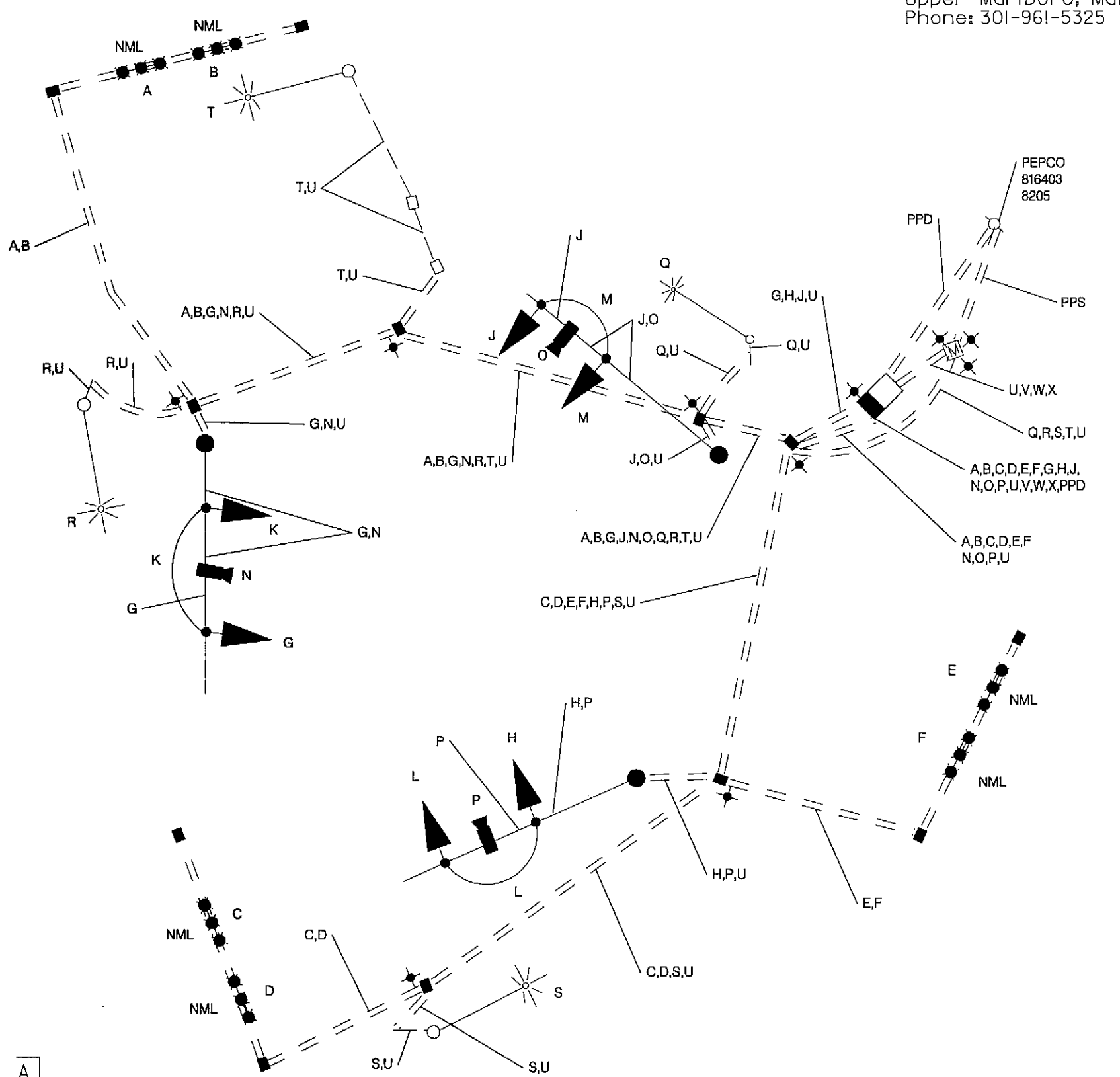
ITEM NO	QUANTITY	DESCRIPTION
9016	2 EA	[UPDATED] 4 CHANNEL DETECTOR AMPLIFIER
9044	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9086	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9570	110 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN: 1 EA - R4-7 (24 IN. X 30 IN.) "KEEP RIGHT" 3 EA - W4-1 (R) (36 IN. X 36 IN.) FY "MERGE" 2 EA - R1-2 (36 IN. X 36 IN.) "YIELD" 3 EA - R5-1 (30 IN. X 30 IN.) "DO NOT ENTER" 3 EA - OM-1 (18 IN. X 18 IN.) "OBJECT MARKER" 1 EA - M3-1 "NORTH" (24 IN. X 12 IN.) 1 EA - M4-1a "ALT" (24 IN. X 12 IN.) 1 EA - M1-4a "US 1" (24 IN. X 24 IN.) 1 EA - M6-2 "DIAGONAL ARROW" (21 IN. X 15 IN.) 1 EA - M3-2 "EAST" (24 IN. X 12 IN.) 1 EA - M1-5 "MD 450" (30 IN. X 24 IN.) 1 EA - M6-3 "DIAGONAL ARROW" (21 IN. X 15 IN.) 1 EA - R3-9b (36 IN. X 48 IN.) "CENTER LANE LEFT TURN ONLY" 1 EA - R6-1 (R) (36 IN. X 12 IN.) "ONE WAY" [UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN: 3 EA - R3-3 (24 IN. X 24 IN.) "NO TURNS"
9571	12 SF	

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1003	3 EA	MAINTENANCE OF TRAFFIC
2002	4 CY	TEST PIT EXCAVATION
5005	75 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5007	75 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY SIZE
8004	2 EA	ADJUST EXISTING HANDHOLE TO GRADE INCLUDING COLLAR
8015	3 EA	MAST ARM POLE & 38 FT MAST ARM ANY "T" DIMENSION
8020	6 EA	NONINVASIVE DETECTOR, UP TO 1000 FOOT LEAD IN CABLE
8021	1 EA	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT PER ASSIGNMENT
8025	3 EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT.
8030	120 LF	CABLE - 1 CONDUCTOR, 2/0 AWG THHN, THWN (ALUMINUM)
8033	400 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8035	950 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8036	250 LF	WOOD SIGN SUPPORTS UP TO 4 X 6 INCHES
8038	142 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8040	1250 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8042	1 EA	METERED SERVICE PEDESTAL EMBEDDED (100 AMP)
8045	60 LF	ELECTRICAL CABLE 1 - CONDUCTOR NO. 8 AWG-THHN/THWN
8046	12 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8050	18 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8056	75 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	475 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8058	850 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

WIRING DIAGRAM



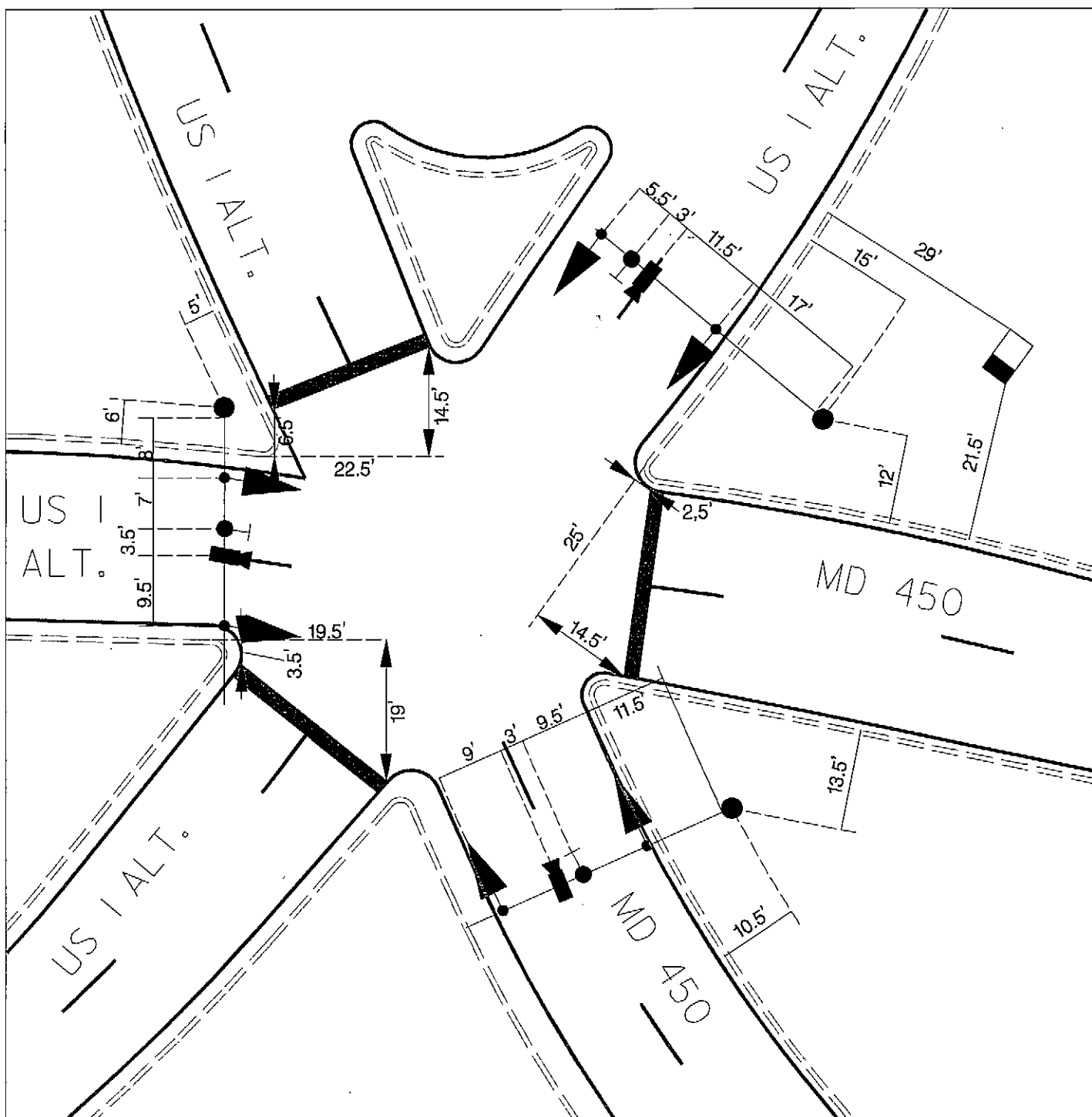
- NML - NON-INVASIVE MICROLOOP PROBE SET
- RU - ROAD USER
- G - GROUND
- 2 - ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC
- U - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- V - ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
- W - ELECTRICAL CABLE, 1 - CONDUCTOR (NO. 8 AWG THHN/THWN)
- X - ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- PPD - PROPOSED PHONE DROP TO BE INSTALLED BY OTHERS
- PPS - PROPOSED UNDERGROUND POWER SERVICE (1 CONDUCTOR #2/0 AWG THHN/THWN ALUMINUM)
- GR - PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
- M - METERED SERVICE PEDESTAL
- NML - NON-INVASIVE MICROLOOP PROBE SET

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE		ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

PROPOSED SIGNAL POLE, CABINET AND VIDEO DETECTOR LAYOUT (NOT TO SCALE)



PHASE CHART

	1	2	3	4	5	6	
PHASE 1	R	R	Y	Y	R	R	
PHASE 1 CHANGE	R	R	Y	Y	R	R	
PHASE 2	R	R	R	R	Y	Y	
PHASE 2 CHANGE	R	R	R	R	Y	Y	
PHASE 3	Y	Y	R	R	R	R	
PHASE 3 CHANGE	Y	Y	R	R	R	R	
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	

TOD No: XX351-07  
SHA No: PG769A55/K55  
MD 450 @ US 1 Alt.



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 450 (ANNAPOLIS ROAD)  
AT US 1 ALT. (BALTIMORE AVENUE)  
BLADENSBURG, MD

GENERAL INFORMATION

SCALE	NONE	ADVERTISED DATE	5/2010	CONTRACT NO.	XX3515168
DESIGNED BY	MCG	COUNTY	PRINCE GEORGE'S		
DRAWN BY	MCG	LOGMILE	16045000.00		
CHECKED BY	BAB	TIMS NO.	K035		
F.A.P. NO.		TOD NO.			
TS NO. 807B-GI	DRAWING	SG-02	OF 02	SHEET NO.	02 OF 02